

Application No. 10/748,014
Amdt. dated November 30, 2006
Reply to Office Action of November 2, 2006

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the examiner for carefully considering this application.

Disposition of the Claims

Claims 38-63 are pending in this application. Claims 1-37, previously withdrawn due to a restriction requirement, are canceled. Claims 38-63 were rejected as indefinite under 35 U.S.C. § 112, second paragraph. Claims 38-50 and 52-63 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,214,949 issued to Reddy.

Claim Amendments

By this amendment, Applicant has canceled claims 1-37 and amended claims 38, 48, 51, 53, 56, and 60. Claim 38 has been amended to indicate that the catalyst includes a first and second catalyst compound; support for this amendment can be found, *inter alia*, in the specification at paragraphs [0037]-[0069]. Claims 48 and 53 are amended to maintain antecedent support. Claim 56 has been amended to delete "additionally-discovered catalyst compound." Claim 60 has been amended to depend from claim 38 and to refer to various "methylalumoxane-activatable compounds" as opposed to "additionally-discovered catalyst compounds"; support for this amendment can be found, *inter alia*, in the specification at paragraphs [0090]-[0095] and in the claims as originally filed. No new matter has been introduced by these amendments. These amendments do not constitute a surrender of subject matter, as the original claims may be pursued in a continuation.

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Claim 51 has been rewritten to be in independent format, and is therefore allowable. Amended claim 51 incorporates features of claims 38 and 48, and no new matter has been introduced by this amendment.

Amendments to the Specification

By this amendment, Applicant has amended specification paragraph [0019] to cancel the purported new matter introduced by the previous amendment filed August 10, 2006.

Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 38-63 were rejected as indefinite under 35 U.S.C. § 112, second paragraph. Specifically, the intended scope of claim 38 was unclear due to the use of "catalyst component" where the specification defined "catalyst compound." Claim 56 was rejected as indefinite under 35 U.S.C. § 112, second paragraph, as the scope of "additionally-discovered catalyst compound" could not be determined.

With regard to the rejection of claim 38, as amended, claim 38 requires a "first catalyst compound" and a "second catalyst compound," wherein the first and second catalyst compounds are supported on a common support. As claim 38 now specifically requires catalyst compounds, the scope of claim 38 is readily ascertainable. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 38 under 35 U.S.C. § 112, second paragraph.

With regard to the rejection of claim 56, as amended, claims 56 no longer refers to "additionally-discovered catalyst compounds" and claim 60 refers to specific catalyst compounds described in the specification at paragraphs [0090]-[0095] following the caption "Additionally-Discovered Catalyst Compounds." As "additionally-discovered catalyst compounds" are no longer referenced in the claims, the scope of claims 56 and 60 are readily

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ascertainable. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 56 under 35 U.S.C. § 112, second paragraph.

Rejections under 35 U.S.C. § 102(b)

Claims 38-50 and 52-63 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,214,949 issued to Reddy ("Reddy"). To the extent that the rejection still applies to the claims as amended, the rejection is respectfully traversed.

Generally, embodiments of Applicant's invention provide for a supported, treated catalyst system produced by a process comprising the steps of (a) forming a supported bimetallic catalyst system comprising a first catalyst compound and a second catalyst compound; and (b) contacting the supported bimetallic catalyst system with a methylalumoxane-activatable compound. Additionally, in the supported bimetallic catalyst system, both the first and second catalyst compounds are supported on a common support.

Reddy discloses the use of a catalyst system comprising a supported Ziegler-Natta catalyst and one or more unsupported metallocene catalysts for the polymerization of olefins. Reddy relates to the combination of two particular types of catalysts for the polymerization of olefins, where any of the conventional supported Ziegler-Natta transition metal compound catalysts or mixtures of supported Ziegler-Natta catalysts can be used (column 5, lines 25-51). The catalyst system is formed by a) selecting a conventional supported Ziegler-Natta catalyst component and b) contacting the catalyst with at least one metallocene compound, among other steps (column 2, lines 33 to column 4, line 25). In a particular embodiment, the supported Ziegler-Natta catalyst component may be contacted with both a bridged and an unbridged metallocene (column 3, line 42 to column 4, line 25).

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Regarding claim 38, Reddy fails to disclose a supported, treated catalyst system produced by a process comprising the steps of (a) forming a supported bimetallic catalyst system comprising a first catalyst compound and a second catalyst compound, where both the first and second catalyst compounds are supported on a common support material; and (b) contacting the supported bimetallic catalyst system with a methylalumoxane-activatable compound. A claim is anticipated only if each and every element as set forth in the claim is found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987); MPEP 2131. At column 5, lines 25-27, and at column 7, line 63 to column 8, line 3, Reddy discloses the invention as a combination of two particular types of catalysts. Specifically, Reddy requires that the catalyst system have an unbridged metallocene catalyst and a heterogeneous catalyst, which may produce a high molecular weight polymer having a molecular weight distribution as broad, or broader, than that from using a heterogeneous catalyst alone. Furthermore, in the examples, Reddy merely indicates charging a conventional supported Ziegler-Natta catalyst and an unsupported metallocene catalyst to a steel cylinder, and then transferring the mixture to a reactor (see Reddy, Example 1 and Example 25). Thus, Reddy merely discloses the use of a mixture of catalyst components, and does not disclose first and second catalyst compounds on a common support, as required by claim 38.

The Examiner asserts that, in Reddy, contact of the supported Ziegler-Natta catalyst with the first metallocene would necessarily result in at least some of the first metallocene becoming deposited on the surface of the supported Ziegler-Natta catalyst. Applicant cannot find support for this assertion in Reddy. Additionally, the mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Robertson*, 163 F.3d 743 (Fed.

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Cir. 1999). The mere combining of a supported catalyst and an unsupported catalyst to form a mixture does not necessarily result in absorption or deposition of the unsupported catalyst on the support. Applicant respectfully requests that the Examiner provide a basis in fact and/or technical reasoning to reasonably support the assertion that contact of the supported Ziegler-Natta catalyst with the first metallocene would necessarily result in at least some of the first metallocene becoming deposited on the surface of the supported Ziegler-Natta catalyst. *Ex parte Levy*, 17 USPQ2d 1461 (Bd. Pat. App. & Inter. 1990); MPEP 2112(IV).

Thus, because Reddy fails to disclose each limitation of claim 38, claim 38 is patentable in view of Reddy. Claims depending from claim 38, including claims 39-50 and 52-63, are also patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

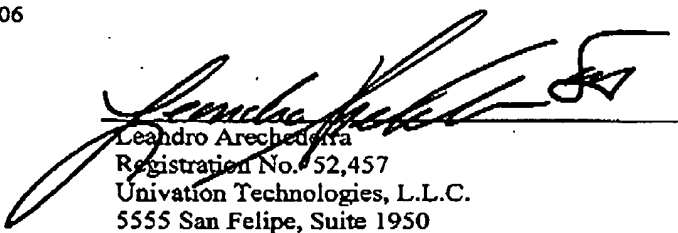
Additionally, Applicant respectfully requests that the Attorney Docket Number be changed to 2003U043.US.

Conclusion

The above amendments are believed to require no further prior art search or, at least, to simplify issues for appeal. Accordingly, entry and favorable consideration are respectfully requested. Further, Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned.

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